35EH5

Power Pentode

7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:		
Voltage (AC or DC)	35 ± 10%	volts
Current at 35 volts	0.15	amp
Direct Interelectrode Capacitances (Approx.):▲		
Grid No.1 to plate	0.65	μμf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	17	μμf
Plate to cathode & grid No.3, grid No.2, and heater	9	μμf

Mechanical:

Operating Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	See *General Section*
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW	7CV

Pin 1 - Cathode, Grid No.3
Pin 2 - Grid No.1
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Grid No.1
Pin 6 - Grid No.2
Pin 7 - Plate

AF POWER AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

PLATE VOLTAGE	150	max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE	130	max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value	0	max.	volts
GRID-No.2 INPUT	1.75	max.	watts
PLATE DISSIPATION	5	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200●	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	225	max.	°C

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Typical Operation and Characteristics:

Plate Supply Voltage	110	volts
Grid-No.2 Supply Voltage	115	volts
Cathode Resistor	62	ohms
Peak AF Grid-No.1 Voltage	3	volts
Zero-Signal Plate Current	32	ma
Max.-Signal Plate Current	32	ma
Zero-Signal Grid-No.2 Current	7.2	ma
Max.-Signal Grid-No.2 Current	12	ma
Plate Resistance (Approx.)	14000	ohms
Transconductance	12000	μmhos
Load Resistance	3000	ohms
Total Harmonic Distortion	8	%
Max.-Signal Power Output	1.2	watts

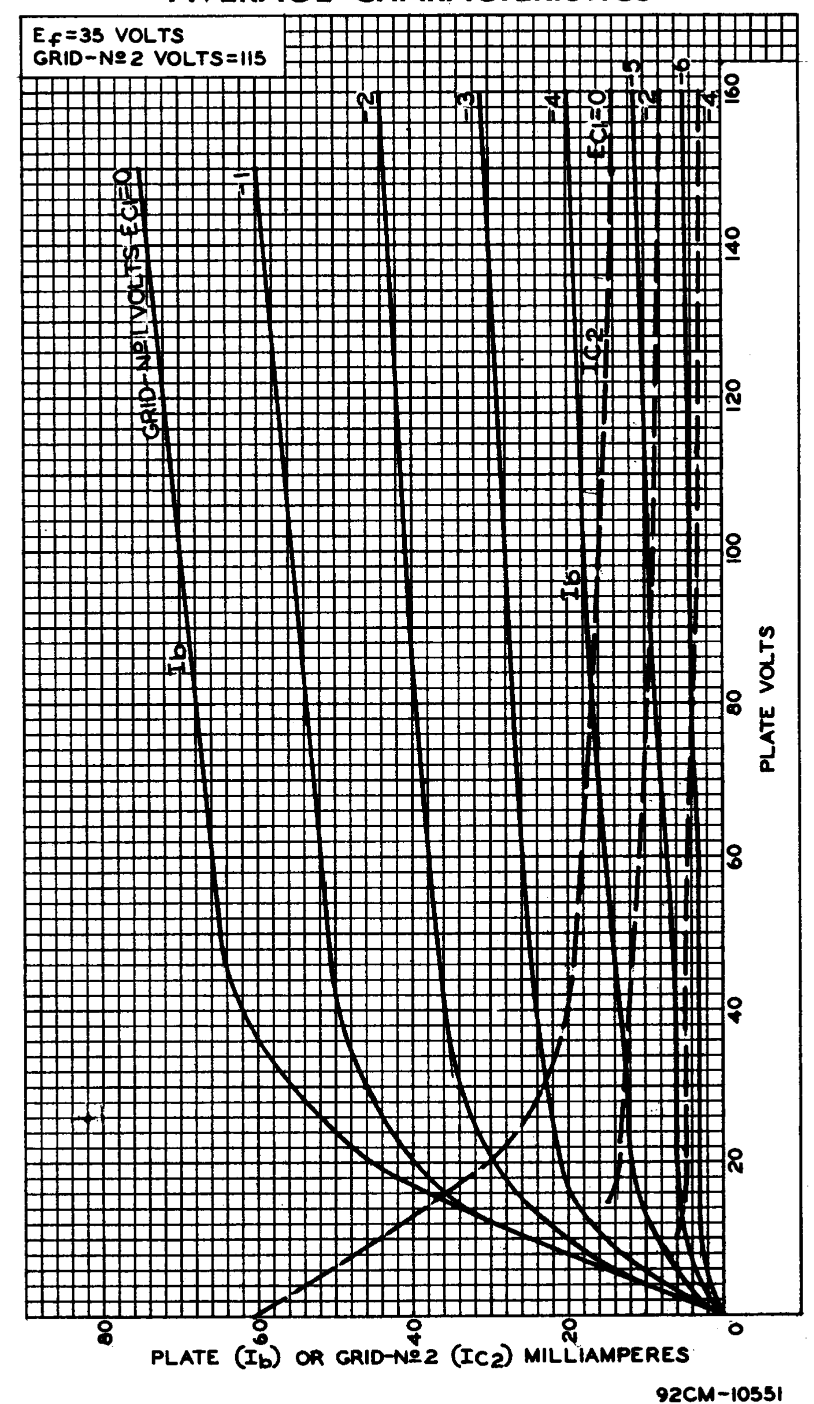
Maximum Circuit Values:

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	0.5 max.	megohm

▲ Without external shield.

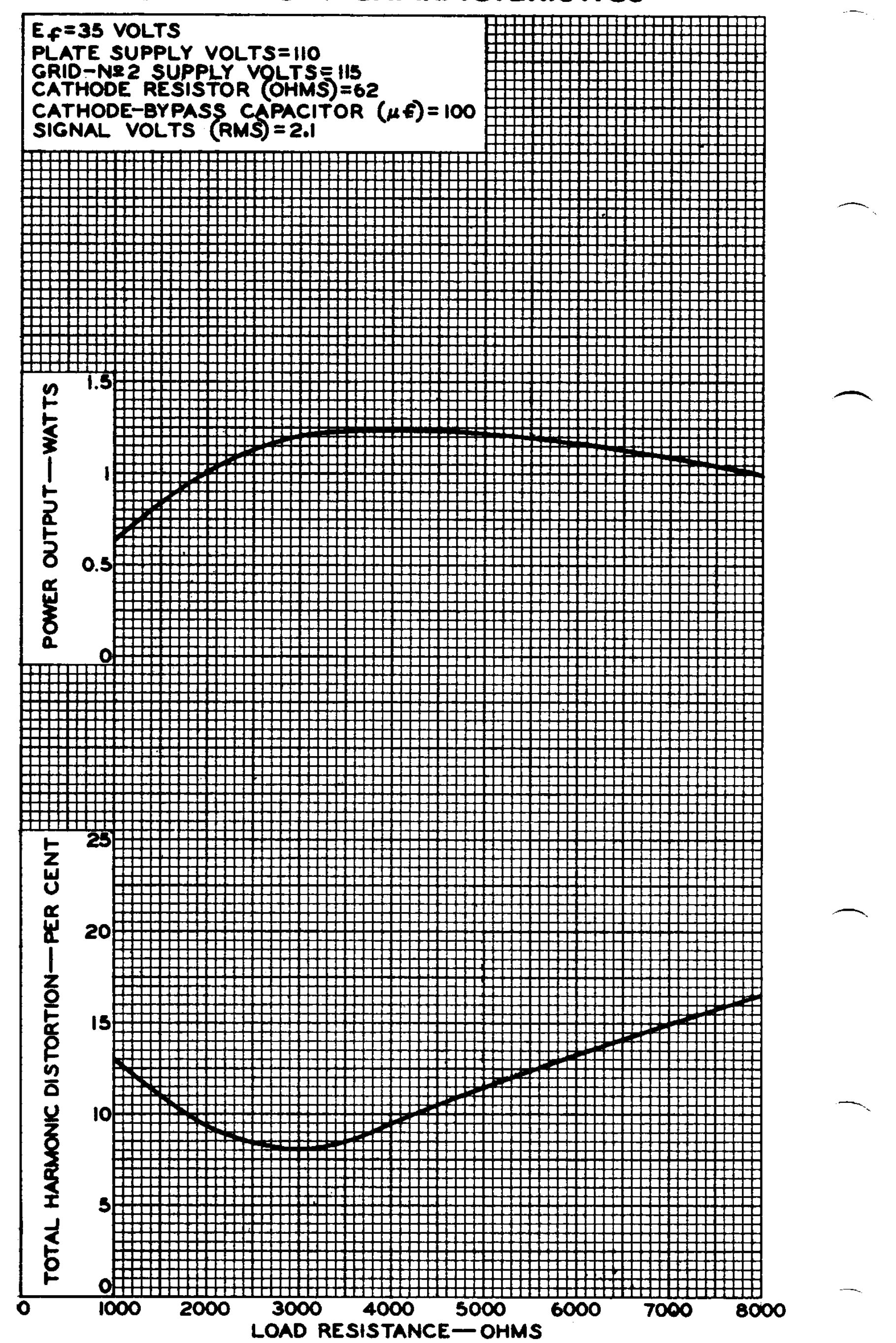
● The dc component must not exceed 100 volts.

AVERAGE CHARACTERISTICS



92CM-10551

35EH5


OPERATION CHARACTERISTICS
Ef=35 VOLTS
PLATE SUPPLY VOLTS=110
GRID-No2 SUPPLY VOLTS=115
CATHODE RESISTOR (OHMS)=62
CATHODE-BYPASS CAPACITOR (μf)=100
SIGNAL VOLTS (RMS)=2.1
POWER OUTPUT—WATTS
1.5
1
0.5
0
TOTAL HARMONIC DISTORTION—PER CENT
25
20
15
10
5
0
0
1000
2000
3000
4000
5000
6000
7000
8000
LOAD RESISTANCE—OHMS
92CM-10547